CLAIMS

1. Method to route a packet switched mode call (PS) from a first terminal (T1) of a first user (A) who desires to communicate with a second user (B), to a second terminal (T2) of said second user (B) in a multi media telecommunication network, said method comprises a step of

registering said second user (B) via said second terminal (T2) according to a bearer level of said telecommunication network thereby providing bearer level location information (GPRS-LOC-B) of said second user (B) being stored in a bearer level location register (HLR) of said telecommunication network, **characterized** in that in the event when said second user (B) is not registered for call control on an application level of said telecommunication network said method comprises the steps of :

a) upon reception of said packet switched mode call for said second user (B) retrieving by a call service means (CSM) of said telecommunication network, said bearer level location information (GPRS-LOC-B) of said second user (B) from said bearer level location register (HLR); and

b) transmitting by said call service means (CSM) an alerting message (ALT), on said bearer level, according to said bearer level location information (GPRS-LOC-B) to said second terminal (T2) of said second user (B) and thereby alerting said second terminal (T2) of an incoming packet switched mode call (PS) order to enable thereby said second terminal (T2) to initialize, upon reception of said alerting message (ALT), an application register message (REG) for call control on said application level whereby application level location information (SIP-LOC-B) is provided for storage in an application level location register (HPD) of said telecommunication network and in order to enable thereby said telecommunication network to route said packet switched mode call (PS) to said second terminal (T2) of said second user (B) on said application level according to said application level location information (SIP-LOC-B).

2. The method according to claim 1, characterized in that said method further comprises a step c) of initializing, upon reception of said alerting

message (ALT) by said second terminal (T2), an application register message (REG) for call control on said application level and thereby providing application level location information (SIP-LOC-B) for storage in an application level location register (HPD) of said telecommunication network in order to enable thereby said telecommunication network to route said packet switched mode call to said second terminal (T2) of said second user (B) on said application level.

3. The method to route a packet switched mode call according to any previous claim, characterized in that said telecommunication network is a mobile telecommunication network.

4. The method to route a packet switched mode call according to any previous claim, characterized in that said bearer level of said telecommunication network is a Generic Packet Radio System.

5. The method to route a packet switched mode call according to any previous claim, characterized in that said call control on application level of said telecommunication network is a Session Initiation Protocol whereby said application register message (REG) is a Session Initiation Protocol register message.

6. A method to route a packet switched mode call, characterized in that said method comprises checking a service preference data base of said multi media telecommunication network upon an actual preferred routing mode of said second user (B), and in the event when said actual preferred routing mode is a packet switched routing mode, executing the method to route a packet switched mode call according to any previous claim.

7. The method to route a packet switched mode call according to any one of claim 2 to claim 6, characterized in that said step c) of initializing by said

second terminal (T2), an application register message (REG) being executed automatically upon reception of said alerting message (ALT).

8. The method to route a packet switched mode call according to any one of claim 2 to claim 6, characterized in that said method further comprises upon reception of said alerting message (ALT) by said second terminal (T2), signaling to said second user (B) by said second terminal (T2) of reception of said alerting message (ALT); and instructing by said second user (B) to said second terminal (T2) of execution of said step c).

9. A call service means (CSM) multi media telecommunication network to route a packet switched mode call (PS) from a first terminal (T1) of a first user (A) who desires to communicate with a second user (B), to a second terminal (T2) of said second user (B), said second user (B) being registered via said second terminal (T2) according to a bearer level of said telecommunication network whereby bearer level location information (GPRS-LOC-B) of said second user (B) is provided and stored in a bearer level location register (HLR) of said telecommunication network, **characterized** in that said call service means (CSM) comprises retrieving means (RET) to retrieve, in the event when said second user (B) is not registered for call control on an application level of said telecommunication network, upon reception of said packet switched mode call (PS) for said second user (B), said bearer level location information (GPRS-LOC-B) of said second user (B) from said bearer level location register (HLR) being coupled thereto; and transmitting means (TR) to transmit an alerting message (ALT), on said bearer level, according to said bearer level location information (GPRS-LOC-B) to said second terminal (T2) of said second user (B) in order to thereby alert said second terminal (T2) of an incoming packet switched mode call (PS) and to enable thereby said second terminal (T2) to initialize, upon reception of said alerting message (ALT), an application register message (REG) for call control on said application level whereby application level location information (SIP-LOC-B) is provided for storage in an application level location register (HPD) of said telecommunication network and whereby

said telecommunication network is enabled to route said packet switched mode call (PS) to said second terminal (T2) of said second user (B) on said application level according to said application level location information (SIP-LOC-B).

10. A second terminal (T2) of a second user (B) in a multi media telecommunication, said second user (B) being registered via said second terminal (T2) according to a bearer level location information (GPRS-LOC-B) of said second user (B) that is stored in a bearer level location register (HLR) of said telecommunication network, a packet switched mode call (PS) needs to be routed from a first terminal (T1) of a first user (A) who desires to communicate with said second user (B), **characterized** in that said second terminal (T2) comprises receiving means (REC) to receive, in the event when said second user (B) is not registered for call control on an application level of said telecommunication network, an alerting message (ALT) in order to be alerted of an incoming packet switched mode call (PS), said alerting message (ALT) being transmitted by a call service means (CSM) of said telecommunication network to said second terminal (T2) of said second user (B) on said bearer level according to said bearer level location information (GPRS-LOC-B), said bearer level location information (GPRS-LOC-B) being retrieved by said call service means (CSM) upon reception of said packet switched mode call for said second user (B) from said bearer level location register (HLR) accordingly, said second terminal (T2) being thereby enabled to initialize an application register message (REG) for call control on said application level whereby application level location information (SIP-LOC-B) is provided for storage in an application level location register (HPD) of said telecommunication network and in order to enable thereby said telecommunication network to route said packet switched mode call (PS) to said second terminal (T2) of said second user (B) on said application level according to said application level location information (SIP-LOC-B).

11. The second terminal (T2) according to claim 10, characterized in that it further comprises initializing means (INIT) to initialize said application register message (REG) for call control on said application level.

12. A multi media telecommunication network, **characterized** in that said network comprises any one of a call service means (CSM) according to claim 9, a second terminal (T2) according to claim 10 and a second terminal (T2) according to claim 11.